ABSTRACT OF THE DISCLOSURE

The present invention provides a method of elongating a glass preform having holes extending in the longitudinal direction while suppressing excess shrinkage of the holes. In the method of elongating a glass preform of the present invention, both ends of the glass preform having the holes extending in the longitudinal direction are held by a first holding member and a second holding member, respectively; and the glass preform is successively heat-melted from one of the ends by a heating means while the distance between the first holding member and the second holding member is increased in the longitudinal direction, to elongate the glass preform. The glass preform is elongated by heat-melting with the heating means in a manner such that the temperature T of the softened portion satisfies a relation represented by $11[°C/mm]\cdot D + 860[°C] < T < 17[°C/mm]\cdot D + 880[°C]$, where D is the outer diameter of a post-elongation glass preform, and T is the maximum temperature of a softened portion of the glass preform heat-melted by the heating means.